BIDIRECTIONAL BRIDGE CIRCUIT HAVING HIGH COMMON MODE REJECTION AND HIGH INPUT SENSITIVITY

ABSTRACT OF THE DISCLOSURE

A bidirectional communications interface is provided that connects a transmitter and a receiver, or a transceiver, to a transmission line. Under an embodiment, the bidirectional interface generates positive and negative polarity data signals using two separate differential amplifiers that receive differential signal pairs from each side of a differential link to the transmission line and the transmitter. The bidirectional interface controls common mode rejection in each of the separate differential amplifiers using bias signals generated in response to an output common mode feedback voltage from each of the differential amplifiers. An output amplifier combines the positive and negative polarity data signals to form single-ended output logic signals. The output logic signals represent data received on the transmission line, and are provided to the receiver.